

# National Temporal Trends in Racial and Ethnic Disparities in Utilization of Endovascular Therapy (EVT) and Outcomes in Acute Ischemic Stroke Findings from Get With The Guidelines (GWTG) -Stroke

Purpose: To investigate changes since the 2015 clinical trials, showing endovascular therapy benefits, has had on trends in racial and ethnic disparities in EVT utilization and outcomes.

Trial Design: Observational data analysis using Get With The Guidelines – Stroke entries with final diagnosis of ischemic stroke; EVT eligible, admitted and discharged between April 2012 and September 2019. N= 302,965  
69.8% White, 16.0% Black, 7.1% Hispanic, 2.8% Asian

## Primary Endpoints:

Before and after 2015 :

- Utilization of EVT
- Outcome post EVT

Adjusted Association of Race/ethnicity EVT Utilization					
	Before 2015		During/After 2015		
	OR (95% CI)	P value	OR (95% CI)	P value	Interaction P value
Black	0.68 (0.58,0.78)	<0.0001	0.83 (0.76,0.90)	<0.0001	0.0187
Hispanic	1.06 (0.79, 1.43)	0.6957	1.01 (0.89, 1.13)	0.9273	
Asian	1.04 (0.80, 1.33)	0.7835	0.96 (0.83, 1.11)	0.5517	
Other	0.99 (0.78,1.24)	0.9025	1.25 (1.15, 1.36)	<0.0001	

Functional Outcomes at 90 days by Race/ethnicity					
	Before 2015		After 2015		
	OR (95% CI)	P value	OR (95% CI)	P value	Interaction P value
Black vs White	0.80 (0.42, 1.54)	0.5073	0.84 (0.75, 0.95)	0.006	0.6871
Hispanic vs White	0.59 (0.28, 1.21)	0.150	0.95 (0.81, 1.12)	0.562	
Asian vs White	0.52 (0.05, 5.72)	0.593	0.80 (0.65, 0.98)	0.034	
Other vs White	1.94 (0.56, 6.68)	0.293	0.89 (0.77, 1.04)	0.151	

## Results:

- There was improvement in EVT utilization across ethnic groups post 2015, likely corresponding to published trials/guidelines.
- There is a persistent but closing gap in EVT utilization between non-Hispanic White and Black patients comparing pre & post 2015.
- Short term outcome such as discharge home and discharge to hospice/inpatient mortality are slightly better for minorities (Black, Asian, Hispanic).
- 90-day mRS was worse in Black and Asian patients.

Results reflect the data available at the time of presentation

